



(12) **United States Patent**
About

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(54) **METHOD AND APPARATUS FOR SURGICAL TRAINING**

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(58) Field of Search 434/262, 269,
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(57) **ABSTRACT**

An apparatus and method for microsurgical training using cadaveric anatomy with filling of the vascular system by fluids under pressure to simulate the appearance and function of live surgery. One or more arteries on the specimen of cadaveric anatomy are cannulated and connected to an arterial reservoir having a flexible container holding an arterial fluid simulating the appearance of blood circulating in the arteries of the living organism from which the cadaveric anatomy is derived. Suitable static pressure simulating the arterial pressure appropriate to that of the living organism is applied to the air in an air-tight space surrounding the flexible container in the arterial reservoir. A pulsating machine provides air pulsations to the space surrounding the flexible fluid container to simulate the normal pulsations of the arterial system. One or more veins on the specimen are also cannulated and connected to a venous reservoir having a flexible container holding a venous fluid simulating the appearance of blood circulating in the veins of the living organism. Suitable static pressure simulating the venous pressure appropriate to that of the living organism is applied to the air in an air-tight space surrounding the flexible container in the venous reservoir. Optionally, if the specimen includes at least a portion of spinal canal, a clear fluid reservoir can be connected to the specimen through the spinal canal to simulate cerebrospinal fluid.

16 Claims, 13 Drawing Sheets

